

Comparisons of Job Characteristics

Focus Occupation: **Avionics Technicians (49-2091)**

Associated Occupation: **Electricians (47-2111)**

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 64

Focus Occupation: Avionics Technicians (49-2091)

Associated Occupation: Electricians (47-2111)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mechanical	6.8	16.5	9.6	<<	Extensive education and/or training may be required
Building and Construction	4.0	14.6	1.3	<<	Extensive education and/or training may be required
Mathematics	9.2	14.5	12.3	<	Expanded education and/or training may be required
Design	5.2	13.4	6.4	<<	Extensive education and/or training may be required
Administration and Management	8.4	12.2	9.4	<<	Extensive education and/or training may be required
Engineering and Technology	5.7	11.8	13.0	>	Current knowledge level is likely sufficient
Physics	4.3	10.9	5.2	<<	Extensive education and/or training may be required
Telecommunications	3.9	10.4	6.3	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 79

Focus Occupation: Avionics Technicians (49-2091)

Associated Occupation: Electricians (47-2111)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Troubleshooting	4.5	12.3	13.8	>	Skill level is likely sufficient
Repairing	3.4	11.6	13.9	>	Skill level is likely sufficient
Quality Control Analysis	5.9	11.0	11.8	0	Current skill level may be sufficient

Equipment Maintenance	3.5	10.3	13.5	>>	Skill level is likely more than sufficient
Installation	1.7	9.4	5.4	<<	Extensive development of skills in this area may be required
Equipment Selection	3.3	8.4	9.1	0	Current skill level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 84			
Focus Occupation: Avionics Technicians (49-2091) Associated Occupation: Electricians (47-2111)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Visual Color Discrimination	6.4	12.8	8.5	<<	Extensive improvement in abilities may be required
Visualization	7.5	12.2	11.0	<	Some improvement in abilities may be required
Finger Dexterity	7.6	11.8	11.5	0	Current ability level may be sufficient
Extent Flexibility	4.8	10.4	5.2	<<	Extensive improvement in abilities may be required
Gross Body Equilibrium	3.2	8.2	2.6	<<	Extensive improvement in abilities may be required
Speed of Limb Movement	3.2	6.6	1.3	<<	Extensive improvement in abilities may be required
Glare Sensitivity	2.6	5.9	1.0	<<	Extensive improvement in abilities may be required
Sound Localization	2.2	5.3	1.3	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 91
Focus Occupation: Avionics Technicians (49-2091) Associated Occupation: Electricians (47-2111)		
Work Activities	Exclusivity of Activity	
Analyze operation of malfunctioning electrical or electronic equipment	68	
Construct or fabricate electrical parts or fixtures	92	
Distinguish colors	44	
Fabricate, assemble, or disassemble manufactured products by hand	11	
Install electrical fixtures or components	71	
Install electronic power, communication, control, or security equipment or systems	76	
Install or replace meters, regulators, or related measuring or control devices	66	
Install/connect electrical equipment to power circuit	57	

Perform safety inspections in industrial, manufacturing or repair setting	32
Read blueprints	10
Read tape measure	41
Read technical drawings	7
Repair electronic components, equipment, or systems	74
Repair or adjust measuring or control devices	71
Repair or replace electrical wiring, circuits, fixtures, or equipment	49
Replace electronic components	63
Solder electrical or electronic connections or components	55
Test electrical/electronic wiring, equipment, systems or fixtures	54
Test electronic or electrical circuit connections	66
Understand service or repair manuals	40
Use electrical or electronic test devices or equipment	40
Use hand or power tools	2
Use oscilloscopes in electronics repair	77
Use soldering equipment	44
Use voltmeter, ammeter, or ohmmeter	52

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 85

Focus Occupation: Avionics Technicians (49-2091)
Associated Occupation: Electricians (47-2111)

Tools and Technologies	Exclusivity
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Data management and query software	1
Electrical measuring and testing equipment	7
Fastener setting tools	12
Forming tools	2
Holding and clamping tools	3
Industry specific software	1
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Light and wave generating and measuring equipment	4
Measuring and layout tools	3
Power tools	2
Respiratory protection	6
Soldering and brazing and welding machinery and supplies	6
Viewing and observing instruments and accessories	4
Vision protection and accessories	3

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.